

AMENORRHEA

I. INTRODUCTION

- A. Clinical problems arise in the management of family planning clients when amenorrhea interferes with or complicates the standard protocols for starting or changing birth control methods.
- B. Any client fulfilling the following criteria should be considered as having the clinical problem of amenorrhea:
Primary Amenorrhea:
 - 1. No bleeding by age 13 in the absence of growth and development of secondary sexual characteristics.
 - 2. No periods by age 15, regardless of the presence of normal growth and development with the appearance of secondary sexual characteristics.
 - 3. No periods 5 years after the initiation of breast development, or pubic or axillary hair development.Secondary Amenorrhea:
In a woman who has been menstruating, the absence of periods for a length of time equivalent to a total of at least three of the previous cycle intervals, or six months without menses.

II. PLAN OF ACTION

- A. The possibility of pregnancy should always be considered and ruled out.
- B. Referral for endocrine evaluation is appropriate for anyone who has not had a menstrual period by age 15, and for any amenorrheic client who has shown no evidence of growth and development of secondary sex characteristics by age 13.
- C. The current menstrual pattern should be compared to the client's usual pattern before pregnancy, hormonal contraception, any medication, significant weight change (15 or more pounds), or significant lifestyle changes.
- D. A historical review and appropriate physical examination should focus on medical conditions, surgical procedures and obstetrical events that might be causing amenorrhea (Appendix).
- E. All current and recent medication and hormonal contraception should be reviewed.
- F. In some cases, with a negative history and physical examination, expectant management is appropriate. The client should be given reassurance and encouraged to await her menstrual period, especially if the duration of amenorrhea is less than 6 months. After 6 months, consider laboratory testing, progestational challenge and/or referral.
- G. When laboratory testing is indicated, a thyroid stimulating hormone level (TSH) and a serum fasting prolactin should be ordered. A client with an abnormal test result should be referred for appropriate evaluation and management.

- F. When appropriate, a progestational challenge may be given by prescribing medroxyprogesterone acetate (Provera™) 10 mg p.o. qd x 7 days to induce withdrawal bleeding within 7-10 days, or medroxyprogesterone acetate (Provera™) 5 mg p.o. qd X 10-12 days depending on the reference consulted. This treatment would be useful for a client who wishes to start hormonal contraception or to have insertion of an IUD. A client who does not respond to a progestational challenge should have a physician consultation.
- G. If the resumption of hormonal contraception is desired after a brief lapse in hormonal contraception, pregnancy must be ruled out. This may be accomplished by getting a negative urine pregnancy test before and after a two-week interval of abstinence or the use of reliable barrier contraception.
- H. In clients with polycystic ovary syndrome, oral contraceptives, patches and vaginal rings with low androgenicity can decrease hirsutism and acne, prevent unopposed endometrial proliferation, and provide contraceptive protection. DMPA can prevent endometrial proliferation and reduce pregnancy risks.
- I. An amenorrheic client with galactorrhea which is remote from pregnancy and not related to any current medication or hormonal contraception should be referred for physician consultation (Appendix).
- J. Prompt referral for physician evaluation is indicated when amenorrhea is associated with other significant symptoms such as headache, nausea, vomiting, visual or auditory changes, and galactorrhea.

REFERENCES

Hatcher RA et al. Contraceptive Technology. 19th Revised Edition. Ardent Media, Inc., New York, 2007.

Schulding, K., Likis, F., Women's Gynecologic Health, Jones and Bartlett, Sudbury, MA, 2006.

APPENDIX

AMENORRHEA: DIFFERENTIAL DIAGNOSIS

HISTORICAL DATA	PHYSICAL FINDINGS	CONSIDERATIONS
Pulmonary tuberculosis, type 1 diabetes mellitus, renal disease, rheumatic heart disease, rheumatoid arthritis, abnormal hematocrit, hemoglobinopathies, cirrhosis, alcohol abuse, anorexia nervosa	Specific to each	Chronic medical conditions may cause amenorrhea
Client takes Dilantin®, digitalis, reserpine, cytotoxic medications, some antibiotics	Specific to each	These medications may cause amenorrhea
Client takes phenothiazines, tricyclics, other tranquilizers, antihypertensives, or antidepressive agents	Leaking fluid from breasts	These medications may cause galactorrhea
Headache, nausea, vomiting	Changes in visual fields or acuity, changes in auditory acuity, galactorrhea	Space-occupying pituitary lesion
Prolonged postpartum lactation	Atrophy of uterus, galactorrhea	Chiari-Frommel syndrome
Necrotic process of adenohypophysis	Cachexia, loss of secondary sex characteristics, lowering of basal metabolic rate	Simmonds' disease
Severe postpartum hemorrhage causing collapse of blood supply to pituitary. Initial weight gain postpartum, then weight loss	Panhypopituitarism: loss of secondary sex characteristics, intolerance of cold, breast vulvar, and uterine atrophy	Sheehan's syndrome
Oral contraceptive pills discontinued with no menses for six months: irregular menses prior to oral contraceptives	Nonspecific	Hypothalamic oversuppression

APPENDIX – Continued

HISTORICAL DATA	PHYSICAL FINDINGS	CONSIDERATIONS
Appetite changes, strenuous regular exercise, high stress level	Cachexia, weight loss or weight gain, diminished body fat	Reversible hypogonadotropic functional amenorrhea
Toxic substance exposure, radiation exposure	Specific to each	Damage to ovaries, hypothalamus, endometrium
Oligomenorrhea, hypomenorrhea and subsequent amenorrhea, cold intolerance	Subnormal temperature, drowsy appearance, apathetic, slow speech, recent weight gain, sluggish or delayed reflexes, puffy facies, pretibial edema (myxedema), hair thinned, eyebrows thinned, dry skin, possible enlarged thyroid	Primary hypothyroidism
Oligomenorrhea, irregular cycles precede amenorrhea, weight loss, weakness, increased appetite, heat intolerance, nervousness	Exophthalmos, stare, lid lag, pretibial lesions and myxedema, palpitations, resting tachycardia, onycholysis, excessive sweating, warm moist skin, temporal alopecia, possible enlarged thyroid	Hyperthyroidism, Graves' disease
Amenorrhea	Obesity of trunk, "buffalo hump", moon facies, osteoporosis, hirsutism, acne, purple striae on trunk, hypertension, glucosuria, red cheeks	Cushing's disease
Amenorrhea	Uterine and breast tissue atrophy, clitorimegaly, deepening voice, temporal baldness, hirsutism, male habitus, acne, increased sebum secretion, male body and pubic hair distribution	Virilizing ovarian tumor

APPENDIX – Continued

HISTORICAL DATA	PHYSICAL FINDINGS	CONSIDERATIONS
Amenorrhea	All of the above associated with virilizing ovarian tumor, plus hypertension, and alterations in glucose metabolism and metabolites	Virilizing adrenal tumor
Irregular bleeding alternating with amenorrhea	Breast size increasing	Feminizing ovarian tumor
Irregular menses beginning with first few years after menarche	Hirsutism, obesity, subfertility	Polycystic ovary syndrome: Persistent anovulation, and hyperandrogenism
Recent or chronic pelvic infection or surgery on ovaries	Specific to each	Tubo-ovarian abscess
Mumps as an adult	Hypoestrogenic	Mumps oophoritis
Gradual cessation of menses, “hot flashes”	Age near 50, vagina, uterus, ovaries atrophic changes, dry vaginal mucosa, elevated serum gonadotropins (FSH, LH)	Menopause vs. ovarian pathology
No menstrual flow in adolescent, denies monthly discomfort in abdomen that could indicate menstruation	Secondary sex characteristics and reproductive structures seem present and patent	Hematocolpos, hematometra, congenital disorders, imperforate hymen, obstructed or deformed cervical os, transverse vaginal septum
No menses since vigorous D&C		Asherman’s syndrome